



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,382	01/20/2006	Robin Mihekun Miller	60,469-253;OT-5210 LAB	5634

7590 02/20/2007
Kerrie A Laba
Carlson Gaskey & Olds
Suite 350
400 West Maple Road
Birmingham, MI 48009

EXAMINER

PICO, ERIC E

ART UNIT	PAPER NUMBER
----------	--------------

3654

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/565,382		MILLER ET AL.	
	Examiner		Art Unit	
	Eric Pico		3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12 and 14-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>01/20/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species A in the reply filed on 12/13/2006 is acknowledged. The traversal is on the ground(s) that "If the independent claims avoid the prior art and satisfy the requirement of unity of invention, no problem of lack of unity arises in respect to any of the claims that depend on the independent claims. In particular, it does not matter if the dependent claim itself contains a further invention". This is not found persuasive because MPEP Appendix A1 further explains "If, however, an independent claim does not avoid the prior art, then the question whether there is still an inventive link between all the claims dependent on the claims needs to be carefully considered. Where a search of the prior art is made, an initial determination of unity of invention, based on the assumption that the claims avoid the prior art, may be reconsidered on the bases of the results of the search of the prior art." Furthermore MPEP Appendix A1 does not state, "it does not matter if the dependent claim itself contains a further invention"

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3654

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim(s) 1 and 10 is/are rejected under 35 U.S.C. 102(b) as being anticipated by Kato et al. JP Publication No. 54-104147.

4. **Regarding claim 1**, Kato et al. discloses an elevator assembly comprising an elevator door 2 mounted for movement relative to a car frame 1; and a sill 14 supported by the car frame 1 wherein the sill 14 moves from a retracted position to an extended position when the elevator door 14 is initially aligned with a landing door.

5. **Regarding claim 10**, Kato et al. discloses the sill 14 comprises a generally flat plate presenting continuous unbroken surface that extends from the car frame 1 to a landing structure 4.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim(s) 2, 11, 12, 14, and 21-24 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. JP Publication No. 54-104147 in view of Kaneko JP Publication No. 02-163283.

8. **Regarding claim 2**, Kato et al. discloses the sill 14 extends outwardly from underneath the elevator door 2 along a generally linear path.

Art Unit: 3654

9. Kato et al. is silent concerning the sill extends to engage a landing structure.

10. Kaneko teaches a sill 3 that extends outwardly to engage a landing structure 2.

11. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the sill disclosed by Kato et al. extend to engage a landing structure as taught by Kaneko to negate difference in level between a cage sill and a hall sill so as not to create an obstruction in the passage.

12. **Regarding claim 11**, Kato et al. discloses the sill extends outwardly from underneath a car floor and is movable along a linear path towards a landing structure.

13. Kato et al. is silent concerning the sill is movable along a rotational path to automatically adjust for misalignment between the car floor and the landing structure.

14. Kaneko teaches a sill 3 movable along a rotational path to automatically adjust for misalignment between a car 1 floor and a landing structure 2.

15. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the sill disclosed by Kato et al. movable along a rotational path as taught by Kaneko to automatically adjust for misalignment between the car floor and the landing structure.

16. **Regarding claim 12**, Kato et al. discloses the sill 14 is pivotally mounted to a car floor and pivots away from the elevator door 2.

17. **Regarding claim 14**, Kato et al. discloses an elevator door assembly comprising: an elevator door 2 aligned with a landing door; a sill 14 extending from underneath the elevator door 2; an elevator and landing doors.

Art Unit: 3654

18. Kato et al. is silent concerning a method for opening the elevator door assembly comprising the steps of: aligning the elevator door with the landing door; extending the sill from underneath the elevator door to engage a landing structure; and opening the elevator and landing doors.

19. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a method for opening the elevator door assembly comprising the steps of: aligning the elevator door with the landing door; extending the sill from underneath the elevator door to engage a landing structure; and opening the elevator and landing doors because these steps would result from the use of the device disclosed by Kato et al. in view of Kaneko in its normal and expected fashion.

20. **Regarding claim 21**, Kato et al. discloses the sill comprises a plate presenting a continuous unbroken surface and moves along a generally linear path extending from the door to the landing door and bridging an operating gap formed between the elevator and landing doors with the plate.

21. Kato et al. is silent concerning the steps of moving the sill along a generally linear path extending from the elevator door to the landing door and completely bridging an operating gap formed between the elevator and landing doors with the plate.

22. Kaneko teaches a sill comprises a plate presenting a continuous unbroken surface and moves along a path extending from the door to the landing door and completely bridging an operating gap formed between the elevator and landing doors with the plate.

Art Unit: 3654

23. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the steps of moving the sill along a generally linear path extending from the elevator door to the landing door because these steps would result from the use of the device disclosed by Kato et al. in view of Kaneko in its normal and expected fashion.

24. **Regarding claim 22**, Kato et al. discloses the sill comprises a plate mounted to a car floor and pivots away from the elevator door to the landing structure.

25. Kato et al. is silent concerning the step of pivoting away from the elevator door to engage the landing structure.

26. Kaneko teaches a sill comprises a plate mounted to a car floor and pivots away from the elevator door to engage a landing structure.

27. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the step of pivoting the plate away from the elevator door to engage the landing structure because these steps would result from the use of the device disclosed by Kato et al. in view of Kaneko in its normal and expected fashion.

28. **Regarding claim 23**, Kato et al. is silent concerning the step of vertically adjusting the position of the sill relative to the landing structure to accommodate misalignment between a car floor and the landing structure.

29. Kaneko teaches a sill vertically adjustable to a position relative to the landing structure to accommodate misalignment between a car floor and the landing structure.

30. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the step of vertically adjusting the position of the sill relative to the

Art Unit: 3654

landing structure to accommodate misalignment between a car floor and the landing structure because these steps would result from the use of the device disclosed by Kato et al. in view of Kaneko in its normal and expected fashion.

31. **Regarding claim 24**, Kato et al. discloses a sill moving in a linear direction toward the landing structure.

32. Kato et al. is silent concerning the step of simultaneously rotating the sill and moving the sill in a linear direction toward the landing structure.

33. Kaneko teaches a rotating sill.

34. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the step of simultaneously rotating the sill and moving the sill in a linear direction toward the landing structure because these steps would result from the use of the device disclosed by Kato et al. in view of Kaneko in its normal and expected fashion.

35. Claim(s) 3-6, 15-17 and 20 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. JP Publication No. 54-104147 in view of Kaneko JP Publication No. 02-163283 as applied to claim 2 above, and further in view of West U.S. Patent No. 4915568.

36. **Regarding claim 3-6, 15-17 and 20**, Kato et al. discloses a door moving mechanism 5 having a lock position where the elevator door 2 and landing door are prevented from opening and a release position where the elevator door 2 and landing door are allowed to move from a closed position to an open position.

Art Unit: 3654

37. Kato et al. is silent concerning a locking mechanism for selectively locking the sill to a landing structure, wherein the locking mechanism comprises an actuator, an arm having a hook portion, and a pin mounted to the landing structure wherein the actuator actuates the hook portion to selectively engage the pin to secure the sill to the landing structure, and wherein the actuator comprises an electric motor.

38. West teaches a locking mechanism for selectively locking a dock leveler 13 to a landing structure, broadly interpreted as the rear of a truck, wherein the locking mechanism comprises an actuator, referred to as drive mechanism and electric motor 17, an arm having a hook portion, referred to as hook shaped restraining member 36, and a pin, broadly interpreted as an ICC bar, mounted to the landing structure wherein the actuator 17 actuates the hook portion 36 to selectively engage the pin ICC to secure the dock leveler 13 to the landing structure, and wherein the actuator 17 comprises an electric motor 17.

39. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a locking mechanisms as taught by West for selectively locking the sill and landing structure disclosed by Kato et al. to facilitate the contact between the sill and the landing structure.

40. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to not switch the door moving mechanism disclosed by Kato et al. to the release position until the hook portion securely engages the pin as taught by West to prevent exit without secure contact between the sill and the landing structure.

Art Unit: 3654

41. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the step of locking the sill to the landing structure prior to opening the elevator and landing doors; releasing a door moving mechanism only after the sill is securely locked to the landing structure; engaging a hook supported for movement with the sill to a pin mounted to the landing structure to lock the sill to the landing structure; and unlocking the sill from the landing structure in response to a request to move the elevator door to a different landing door because these steps would result from the use of the device disclosed by Kato et al. in view of Kaneko and West in its normal and expected fashion.

42. Claim(s) 8, 9, 18 and 19 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. JP Publication No. 54-104147 in view of Kaneko JP Publication No. 02-163283 and West U.S. Patent No. 4915568 as applied to claim 4 and 15 above, and further in view of Miyamoto et al. JP Publication No. 06-032572.

43. **Regarding claim 8**, Kato et al. is silent concerning a track supporting the elevator door for movement between open and closed positions, the track including a first track portion and a second track portion that is non-parallel to the first track portion; and a seal positioned between the elevator door and the car frame wherein the door applies a compressive sealing force against the seal as the door moves from the first track portion to the second track portion.

44. Miyamoto et al. teaches a track, referred to as guide grooves 14, supporting an elevator door 2 for movement between open and closed position, the track 14 including a first track portion and a second track portion, referred to as curved parts 15, that is

Art Unit: 3654

non-parallel to the first track portion; and a seal, 16-18 positioned between the elevator door 2 and the car frame wherein the door applies a compressive sealing force against the seal 16-18 as the door 2 moves from the first track portion to the second track portion 15.

45. It would have been obvious to one of ordinary skill in the art at the time of the invention to support the elevator door disclosed by Kato et al. with a track including a first track portion and a second track portion that is non-parallel to the first track portion; and a seal positioned between the elevator door and the car frame as taught by Miyamoto et al. to tightly close up a car so as to prevent invasion of noise.

46. **Regarding claim 9 and 19**, Kato et al. discloses the sill moves at a first extension speed.

47. Kato et al. is silent concerning the elevator door extends outwardly away from the car frame at a second speed slower than the first speed to release compression on the seal.

48. Miyamoto et al. teaches elevator doors extend outwardly away from the car frame at a speed to release compression on the seal 16-18.

49. It would have been obvious to one of ordinary skill in the art at the time of the invention to extend the elevator doors outwardly away from the car frame as taught by Miyamoto et al. at a speed slower than a first extension speed of the sill disclosed by Kato et al. to tightly close up a car so as to prevent invasion of noise.

50. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the step of initially moving the elevator door and the sill

Art Unit: 3654

in a first direction outwardly away from the car frame once the elevator and landing doors are aligned, continuing to move the sill in the first direction until the sill engages the landing structure, and subsequently moving the elevator door in a second direction parallel to the car frame after the sill is locked to the landing structure because these steps would result from the use of the device disclosed by Kato et al. in view of Kaneko and West in its normal and expected fashion.

51. **Regarding claim 18**, Kato et al. is silent concerning the steps of positioning a seal between the elevator door and a car frame; supporting the elevator door on a track for movement relative to the car frame between open and closed positions; and compressing the seal between the elevator door and the car frame as the door moves from a first track portion to a second track portion that is non-parallel to the first rack portion.

52. Miyamoto et al. teaches the steps of positioning a seal 16-18 between the elevator door 2 and a car frame; supporting the elevator door 2 on a track 14 for movement relative to the car frame between open and closed positions; and compressing the seal 16-18 between the elevator door 2 and the car frame as the door 2 moves from a first track portion to a second track portion 15 that is non-parallel to the first rack portion.

53. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the steps of positioning a seal as taught by Miyamoto et al. between the elevator door and a car frame disclosed by Kato et al.; supporting the elevator door disclosed by Kato et al. on a track as taught by Miyamoto et al. for movement relative to

Art Unit: 3654

the car frame between open and closed positions; and compressing the seal as taught by Miyamoto et al. between the elevator door and the car frame disclosed by Kato et al. as the door moves from a first track portion to a second track portion that is non-parallel to the first rack portion to tightly close up a car so as to prevent invasion of noise.

Conclusion

54. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fischer U.S. Patent No. 1529122, Alexander U.S. Patent No. 2120081, Pope U.S. Patent No. 2739354, Bridges et al. U.S. Patent No. 3327650.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Pico whose telephone number is 571-272-5589. The examiner can normally be reached on 6:30AM - 3:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Matecki can be reached on 571-272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EEP



PATRICK MACKEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600